

A² the sample, wherein the presence of the COX-2 specific metabolite in the sample indicates the activity of the COX-2 enzyme in the subject.

Claim 13 (Amended). A method of measuring an activity of a COX-2 enzyme in a subject, comprising:

- A³
- a) obtaining a sample of the subject;
 - b) measuring an amount of a COX-2 specific metabolite of a 2-arachidonylglycerol compound in the sample; and
 - c) relating the amount of the COX-2 specific metabolite to the activity of the COX-2 enzyme.
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A⁴ Claim 14. The method of Claim 13, further comprising comparing the amount measured to a standard value, which correlates to an amount of signal with a known amount of a COX-2 specific metabolite of a 2-arachidonylglycerol compound.

A⁵ Claim 25. The method of claim 24, further comprising relating the amount of the metabolite in the sample to the activity of the COX-2 enzyme in the subject, and relating said amount of the COX-2 specific metabolite to the activity of the COX-2 enzyme.
